

Brian Bush

Snakes Harmful & Harmless, 9 Birch Place Stoneville WA 6081 bush@iinet.net.au

I find today my field herping has become more target-orientated. Rather than going into the field with the shotgun approach of photographing anything I find, I now direct my energies, when working in relevant areas that allow it, to one or two species found there, although I do continue to get shots of most of the peripheral frogs and reptiles that turn up during this process.

I consider myself very fortunate because my job is my greatest benefit in all of this along with my self-employed status. My job of visiting remote mine sites to provide the company nominated workers with the skills to manage the reptiles generally, but particularly the venomous snakes in their respective workplaces, allows me the ability to travel through the remote regions of this vast state herping where the mood takes me and basically I'm being paid to do so.

Since arriving in Western Australia (WA) from New South Wales in 1976 I have fostered a relationship with professional herpetologists, naturalists and venom researchers generally. Because I have always been willing to freely assist these people, the WA wildlife authority, currently the Department of Parks

and Wildlife (DPaW), has usually provided me with the relevant licences to continue undertaking my contribution, whether this be disturbing wildlife to obtain photographs, or opportunistic collecting for the WA Museum. For this privilege, I am extremely grateful.

In this article, I will relate some of my successful and unsuccessful endeavours and also include a selection of photos of both my workplace and the herpetofauna I share it with.

Heading out of town

I had left home thirty minutes ago and was driving towards the WA Wheatbelt town of Toodyay. This was the norm for me as I headed to work for a couple of weeks in the bush visiting remote mine sites to train their people to manage the snakes encountered within the camps and workplaces. I have three primary road routes I take when going on these regular work runs and this one is the most travelled because of the great amount of work I do in the mineral rich Pilbara Region. It takes me through the wheatbelt to connect with the Great Northern Highway just south of Pithara, then I continue north

through Dalwallinu and thankfully leave the boring cleared paddocks behind me about thirty kilometres north of Wubin.

The discomfort I experience when driving through the wheatbelt is analogous to that an elite athlete experiences during periods of intense training – although mine is psychological, we both have to push through the pain barrier!

Travelling north from there I pass through the Murchison towns of Mt Magnet, Cue, Meekatharra and the Kumarina Roadhouse in the Gascoyne Region, eventually hitting the Pilbara near Newman, eleven hundred and fifty kilometres from home.

The second most commonly travelled work route I take is the Great Eastern Highway through the Northam area, although bypassing the town, which takes me east for the five hundred kilometres to Coolgardie where I leave it as it veers south and instead continue east for the short run to Kalgoorlie. Heading north of there takes me into the WA Eastern Murchison Goldfields and to towns like Menzies, Leonora, Laverton, Leinster and Wiluna.

My least travelled is the tourist route up the Brand Highway that I access a little north of Bullsbrook. This takes me through to Dongara where it connects to the Northwest Coastal Highway passing through Geraldton, Carnarvon and eventually Karratha, with the Pilbara zoogeographical region extending south of there, to the about Onslow. I go this way if my work is in the mid-west coastal regions or my first Pilbara job is near Paraburdoo, Pannawonica or Karratha. This highway provides access to the world heritage listed Shark Bay and Coral Bay, Exmouth Gulf and Cape Range areas, all of which are prime WA destinations for tourists. I like my own company, not that of others, so I tend to avoid travelling this route unless I am in a hurry and truly hard pressed – there are just too many people and vehicles!



Figure 1. The major Western Australian regions and some of the towns mentioned in this article.

Accidents happen

Suddenly my daydreaming ends as I see a snake slithering out of a cleared paddock onto the road from the left. With my foot hard on the brake peddle I bring my Patrol to a stop about 200 metres past the spot and chuck a U-turn, pulling up with the snake, which has continued to move in the same direction and now is just leaving the paved part of road and moving onto the gravel verge about ten metres ahead of my vehicle and still to my left, but on the opposite side of the road to when I first saw it. It is a very dark and slender individual of about a metre in length.

I am out of the vehicle and approaching it in a hurry. This will be easy I'm thinking, as the way ahead of it is blocked by a very steep and rapidly rising unvegetated slope. It will never get up there and will have to retreat by moving ahead of me along the road verge, or return across the road back to the cleared paddock from where it had come. Either way this will be easy - I've already got this one in the bag.

To my surprise it's speed hardly faltered as it effortlessly climbed the slope still several metres ahead of me. For me to catch it now, there was only one thing I could do. I had to increase my speed and start my ascent immediately but angled across the slope so as to intercept the snake before it got into the vegetation at the top. I had taken less than three paces when my legs violently went out from under me as both feet lost their grip on the ground as they rolled on fallen honkey nuts (eucalypt seed pods) – as my legs went to the right, my hands went to the left to cushion my fall. I lay there for a minute or so regaining my composure; thankful that in all this time from first seeing the snake until my ungainly fall, no other vehicle had passed.

Afterwards, when I had regained my composure and the colour returned to my face, and while I dug imbedded stones out of the wound on the palm of my left hand with my pocket knife, I did consider the possible negative scenario that could have played out during this event – a silly seventy year old alone in the bush with a broken leg! I made a mental note to take it a little easier in future, or my field herping days might end prematurely.

A little skink Lerista quadrivincula Shea 1991

In 1980, WA naturalist, Harry Butler was herping on Karratha Station. Near the Maitland River, he turned over a fallen Wedge-tailed Eagle's nest beneath a bloodwood tree and found several species of lizard. Amongst these were the four-fingered, four-toed,

blinking *Lerista quadrivincula*. A lizard that has not been seen since, at least by anyone knowing its significance. Storr originally described and named it *Lerista "concolor"* in 1990, but this name was found to be unavailable and in 1991 Shea proposed its current specific name as a replacement.

The type locality for *L. quadrivincula* is the same for the skink *Notoscincus butleri* that was described by Storr in 1979.





Figure 2 (a & b). Holotype of *Lerista quadrivincula*. Photos by Brad Maryan.

Brad Maryan and myself have since targeted this species to get photos in life, but have not been successful. We contacted Harry Butler well before he died and he drew us a mud map based on his notes, although this has not helped us to date, however we do believe we are looking in the correct area.

One of the significant problems I experience when searching for it is that Buffel Grass has been successfully introduced as pasture on this station and it is dominating much of the area. The usual collecting technique employed for *Lerista* species is raking, but to do so in this exotic grassland habitat is extremely difficult. If an alien did not drop off this lizard and it is naturally rare with a limited distribution and maybe a very specialised ecology

relying on a specific endemic vegetation association, then I suppose the introduction of the exotic grass may have been the straw that pushed it off the edge to extinction? This is purely supposition though and I like to think I will get it one day!

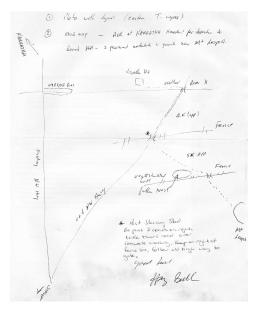


Figure 3. The late Harry Butler's mud map.

A large elapid *Oxyuranus temporalis* Doughty, Maryan, Donnellan & Hutchinson 2007

This large elapid was first collected in September 2006 north of Giles in the Central Ranges, WA. It was formally named in 2007 and I definitely wanted photos of this snake, so headed out to the Ilkurlka area in the Western Deserts with Bruce Budrey for two-week stints in September 2012, October 2013 and again with Bruce, plus a couple of additional friends in October 2014. On this third trip we were successful providing me with the opportunity to get photos. The magazine, Scales and Tails published a report of these ventures in an article in the July 2015 #42 issue, so I won't waffle here on this success apart from including a photo of the snake.

I will say however, it was such a pleasure to be out in that isolated country with good company and the lack of success during the first two trips was not a big concern. It meant that we would be back with our motivation even stronger because of our failure. The diversity of herp out there well and truly kept us entertained. During those visits, I photographed fifty-three species of reptile, comprising thirteen geckos, four legless lizards, sixteen skinks, seven dragons, two monitors and eleven snakes.

I wouldn't dare mention here just how many cans of beer Bruce and I consumed on each trip, but I will say we only ran out once towards the end of the first trip. After that we never underestimated the required ration again. I am sure consumption goes up or down relative to supply because we never had excess when leaving the western desert and always had to source another block at the Desert Inn Hotel on the way through Laverton.



Figure 4 (a & b). Western Desert taipan (Oxyuranus temporalis).

McKenzie's Chenopod Dragon Ctenophorus mckenziei (Storr 1981)

In the early 2000's, Brad Maryan, Robert Browne-Cooper, David Robinson and myself were working on a southwest regional herp book that would eventually be published in 2007 by University of WA Press entitled *Reptiles and Frogs in the Bush: Southwestern Australia*.

Obtaining photos of all the species to be included in this book would not usually pose too much of a problem, as it is just a matter of putting the word out there advising what shots you were after and if anyone has them? Once known, the follow-up includes a deal for permission to use that person's photo, which generally these days is an acknowledgement in the book and a copy of that book. Our problem in the case of McKenzie's Chenopod Dragon is at that time no one had photographs of it for us to use.

Beauty! This meant an excuse for three of the authors to plan a focused field trip to get their own photographs. David Robinson was working away and could not join us on this.





Figure 5 (a & b). McKenzie's Chenopod Dragon (*Ctenophorus mckenziei*) and habitat – slide scans.

The background research was done and plans were made to visit the type locality on Noondoonia Station, which was currently the only known location for this species, although another isolated population has been found on Colona Station in southwest South Australia since our book was published.

Our plan was to drive to Kalgoorlie, then east along the trans line to Zanthus, where we would head south down the Balladonia track. It was all good, apart from a flat tyre in the Falcon shortly after leaving Kalgoorlie, which left me a little anxious when thinking about no spare now – I alleviated my concern by considering if worse came to worse and I got another flat tyre, I simply had to pull the valve insert out of the rim and fill the tyre with sand. I thought this would be a much better temporary fix than filling the tyre with Spinifex. Anyway, my

concerns were unfounded and we arrived at Noondoonia Station homestead without further mishap as planned.

A brew with the station owner followed and a chat with him discussing a few ideas on what tracks would best take us to or near the type location, eight kilometres southwest of Ponier Rock. We had our mud map, but no GPS as in those days it was not usually part of our field herping equipment. We busted our backsides, but could not find either the type locality, or the dragon - a heap of new tracks and fence lines had been installed since the Holotype was originally collected in 1978.

OK, back to Perth to immediately plan a second trip in a fortnight, although this time we would borrow the WA Museum's hand-held GPS. It still has me beat to this day why we did not take it on that first trip? Maybe we were a little too arrogant for our own good when it came to embracing modern technology? It was definitely none of our strong points, although if Dave was with us, I bet he would have a GPS in his kit, even back then.

A couple of weeks later Brad, Rob and myself head out again, but this time we were extremely confident, especially me, as there was no flat tyres on this trip to worry about.

We set the GPS with the coordinates, followed fence lines until we came to gates we needed to pass through to allow us to continue in the correct direction and worked our way to the type locality. The original specimens were collected during a government survey and once we got there, it was obvious we were at the correct site because we found a plastic pit-trap cover, a steel dropper and a couple of other small pieces of paraphernalia overlooked when the survey party left.

We immediately got at it and saw a couple of dragons but could not get close enough to catch them, but this time we were well-prepared and had a flick rod rigged with a running noose. Rob was so good at noosing dragons that we labelled him the Quintessential Aussie Nooser and if you have a copy of the southwest book, look at the photo of him noosing a Gould's Sand Monitor on Page 36. We photographed both sexes that day and returned to Perth very satisfied.

The photos of the dragon and the habitat included here are a little below good quality being slide scans – it was to be another year or two before I got a decent digital camera.





Figure 6 (a & b). A running noose used to catch lizards and a lucky noosing of a Desert Skink (*Liopholis inornata*) just forward of the back legs. Lizards beware when Old Codger Busho is on the prowl with his flick rod and set noose.

Gascoyne Pebble-mimic Dragon (Tympanocryptis gigas)

I was visiting the WA Museum (WAM) shortly after a revision of the pebble-mimic dragons was published in 2015, when Dr. Paul Doughty, Curator of Herpetology and co-author of the revision mentioned that no fresh tissue was in the collection for the Gascoyne Pebble-mimic Dragon, which had been previously described by Mitchell as a subspecies of *T. cephalus* in 1948. Preserved specimens are also poorly represented in collections with only three in the WAM at the time and two in the SA Museum (SAM), with a third SAM specimen (Holotype) missing since 1976 and presumed lost or destroyed. I absorbed this snippet of information regarding the lack of tissue and filed it away in the back of my mind.

Shortly afterwards I was working in the Pilbara at Hamersley Iron's Yandi village and when completed I had a couple of days off before being needed for work in Tom Price. I had not done too good a job of filing the information about this dragon to the back of my mind, because it kept coming to the fore and I was continually thinking about it, so damn, I'm going after it!

I check my map for the quickest route to get me into the region where it is known to occur - if I go via Karijini Drive, Paraburdoo and Nanutarra, it will be about six hundred kilometres one way. I decide to give it a shot, but considering the gravel roads I will have to contend with slowing me down, I wont have a lot of time to look for it. Well, the worse case scenario is I will experience the lay of its land for future reference and future trips.



Figure 7. Gascoyne Pebble-mimic Dragon (*Tympanocryptis gigas*) habitat.

After driving for most of the day, by mid-afternoon I find I'm about one hundred and fifty kilometres south of Nanutarra on a station track that has taken a flogging from the recent heavy rains. I'm not in a hurry though so cruising slowly is not a problem as I plan to camp in suitable habitat and do some intensive searching when I'm fresh after a good night's sleep in the morning. Also, this slow pace is great to see stuff and I have already identified and photographed a couple of other agamid species, namely the common Central Netted Dragon (*Ctenophorus nuchalis*) and less common Pilbara Ring-tailed Dragon (*C. c. caudicinctus*).

It's approaching 18.00 when I cross a cattle grid and the country opens out before me with small sparsely spaced acacia shrubs over a vast area of pebble-strewn ground. This looks as good a habitat as I have seen since entering Williambury Station, so I decide to park up off the road and boil the billy.



Figure 8. Gascoyne Pebble-mimic Dragon (*Tympanocryptis gigas*) in cryptic pose.

The ABC Radio announcer says it is exactly 18.14 when my attention is attracted by a subtle movement on top of a small stone about twenty metres to the west of where I am sipping my coffee. I immediately go to investigate, expecting it to be another Central Netted Dragon, but I can't find it, or anything else that may have been responsible for the movement I saw from the back of my vehicle. There are no burrows nearby for a lizard to retreat into, just an expanse of small pebbles interspersed by slightly larger stones with the whole area dominated by small pieces of quartz. I squat down and systematically search the ground out from the larger stone where I first saw the movement.

Nothing!

I repeat this process several more times and then, within ten centimetres of the larger stone, I see it - a Gascoyne Pebble-mimic Dragon in cryptic pose! I must have passed my eyes over it several times previously without seeing it.

I grab it and am instantly overwhelmed with emotion - how could I be so damned lucky?

I even got a little cocky, thinking how easy is this; I will get a heap more in the morning for sure!

I went for a walk to see if I could find another, but after an hour, no more where found. The temperature had dropped and the light was fading, so I took some photos of the lizard. I will get more in the cool of the following morning.

Talk about lucky, the next day I searched and searched that pebble-strewn ground, but could not find another. After getting some habitat photos, I packed my gear and headed to Tom Price for my next job.

I still can't believe that the most difficult herp can also be the easiest – I regularly look at my photos of this lizard to remind me it was not a dream!



Figure 9. Gascoyne Pebble-mimic Dragon (*Tympanocryptis gigas*).



Figure 10. In the heat of the day when the temperature exceeds 40 degrees centigrade, there's not much point herping.

Ring-tailed dragons (Ctenophorus caudicinctus subspecies)

For years now I have been fascinated in the group of agamids called ring-tailed dragons, particularly those in WA. Simplistically taxonomists recognise one species and six subspecies occurring in Australia, although I prefer to elevate all described subspecies to full species and believe we currently have an additional two undescribed taxa, which will eventually bring the number in this group to eight recognizable species with seven of these occurring in WA and maybe even more waiting to be found.



Figure 11. A large undescribed member of the ringtailed dragon group from the central eastern Gascoyne Region of WA.

At every opportunity, when in suitable habitat, I search out members of this group, but have also stumbled upon populations in areas where I have not previously seen them.

When chasing active ring-tailed dragons in the daytime, noosing is the only technique that works, although another technique I regularly employ is turning rocks by head torch at night. The obvious benefits with this are the lack of flies and the ease of catching the light-bedazzled dragons. Keep in mind, during the heat of the day, there is only one thing a field herper can do and that's park up under a shady tree and recharge his batteries with a few beers, while waiting to head out into the bush again on foot in the cooling late afternoon.



Figure 12. A small undescribed member of the ringtailed group from the northeastern Gascoyne Region of WA.

I do many jobs in the North Eastern Murchison Goldfields, but have experienced great difficulty finding and photographing the small Southern Murchison Ring-tailed Dragon (*Ctenophorus caudicinctus infans*). After numerous trips over several years, I eventually got onto a population by examining low granite outcrops at night. This allowed me to visit more outcrops within the same timeframe without experiencing the same degree of fatigue that would have surely been the case if I tried covering the same distance over uneven ground during the heat of the day.

I did not initially find any adults this way but did find three neonates, which told me I was onto a breeding population. I swagged it near that outcrop and next morning at about 08.00, armed with my noose, I headed out – within about an hour, I had three adults in bags to photograph. Terrific!

This member of the group shows little sexual dimorphism, but I tentatively determined sex by examining the degree of development of the preanal and femoral pores and using this method considered two of the adults to be females and the other to be male.





Figure 13 (a & b). Adult male Southern Murchison Ring-tailed Dragon (*Ctenophorus caudicinctus infans*) left and female right.

More targets out there

Although I have spent many years in the field in WA, there are many species I have had little success finding. A few that come to mind are *Lerista quadrivincula*, mentioned in this article, which is very high on my list, but so is *Cryptagama aurita*, along with species I have found, but infrequently so, such as Pilbara Elegant Delma (*Delma elegans*) and Pilbara Flat-headed Blind Snake (*Anilios ganei*).

These elusive species provide me with the motivation to both retain my passion for field herpetology and to stay alive – just in case I stumble upon one of them tomorrow!

While I am out there in the field focused on herping, there's always a chance!





The author, Brian Bush is an Aussie larrikin with a passion for field herpetology. Here he is asking, "How do you like your steak?" and having a beer at the WAHS 2016 Expo Dinner.



Time for a brew!